

CLAIMS

1. (Currently Amended) A high-throughput screening method of antagonistic material of integrin, comprising the steps of:

- a) immobilizing integrin  $\alpha_{ITb}\beta_3$  and/or  $\alpha_v\beta_3$  on a protein chip having surface coated with calixarene derivative;
- b) reacting ligand protein labeled with fluorescence and peptide pool of peptide library on the protein chip on which the integrin is immobilized;
- c) washing the protein chip with buffer solution after the reacting; and
- d) measuring the degree of ligand binding after the washing.

2. (Previously Presented) The high-throughput screening method of claim 1, wherein the ligand is any one selected from the group consisting of vitronectin, fibronectin, collagen, laminin, Von Willebrand Factor (vWF) and fibrinogen.

3. (Previously Presented) HSDVHK peptide (SEQ ID NO:1), HGDVHK peptide (SEQ ID NO: 2), HHLLHK peptide (SEQ ID NO: 3), HGLVHK peptide (SEQ ID NO: 4) or HGDLHK peptide (SEQ ID NO: 5) having antagonistic activity of integrin  $\alpha_{II}\beta_3$  and obtained by the screening method of claim 1 or claim 2.

4. (Previously Presented) A pharmaceutical composition for treating cancer, comprising peptide of claim 3.

Please add new claims 5, 6 and 7 as follows:

5. (New) A high-throughput screening method of antagonistic material of integrin, comprising the steps of:

- a) immobilizing integrin  $\alpha_{IIb}\beta_3$  and/or  $\alpha_v\beta_3$ ;
- b) reacting ligand protein labeled with fluorescence and peptide pool of peptide library on the protein chip on which the integrin is immobilized;
- c) washing the protein chip with buffer solution after the reacting; and
- d) measuring the degree of ligand binding after the washing;

said method providing a peptide having antagonistic activity of integrin  $\alpha_{II}\beta_3$  that is selected from the group consisting of HSDVHK peptide (SEQ ID NO:1), HGDVHK peptide (SEQ ID NO: 2), HHLLHK peptide (SEQ ID NO: 3), HGLVHK peptide (SEQ ID NO: 4) and HGDLHK peptide (SEQ ID NO: 5).

6. (New) The high-throughput screening method of claim 5, wherein the ligand is any one selected from the group consisting of vitronectin, fibronectin, collagen, laminin, Von Willebrand Factor (vWF) and fibrinogen

7. (New) A pharmaceutical composition for treating cancer, comprising peptide of claim 5.